CC1600-Series

Rackmount Modem & DSU Systems

Benefits

Consolidate modems and DSUs

Scalable

Proven reliability

Easy to install

The scalable CC1600-Series 19" rackmountable card cage consolidates up to 16 V.34/33.6K modem cards for dial-up or 2- and 4-wire leased line service or 56K DSU cards. This system is ideal for businesses that want to provide dial-in remote access, dial-in/dial-out faxing, or point-to-point connectivity with branch offices.

Rackmount Modem/DSU System for Remote Access Servers, Fax Servers, and Point-to-Point Connectivity

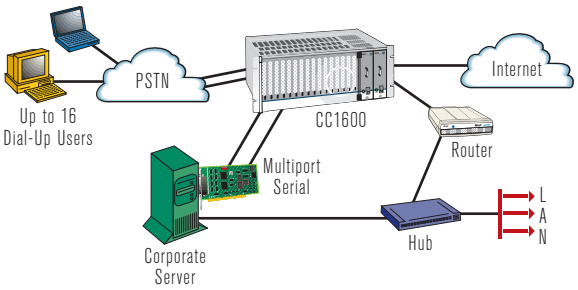
Features

- Rackmount chassis supports up to 16 V.34/33.6K modems or 56K DSUs
- Hot-swappable modem and DSU cards
- Hot-swappable, dual redundant power supplies
- Easily scaled capacity to accommodate increased load/usage
- DSUs support sync equipment to 56K bps or async equipment to 19.2K bps
- Modems support dial-up and 2-wire leased line
- BLR modems support 4-wire leased line and dial backup
- Industry-standard error correction and data compression
- Expanded Class 2 faxing at 14.4K
- Modems support callback security, DTMF tone detection, and remote configuration
- Flash memory on modems for firmware updates
- Two-year warranty

MultiTech® Systems

Applications

Remote Access. Give your telecommuters and road warriors access to the central site LAN and the Internet with the CC1600-Series.

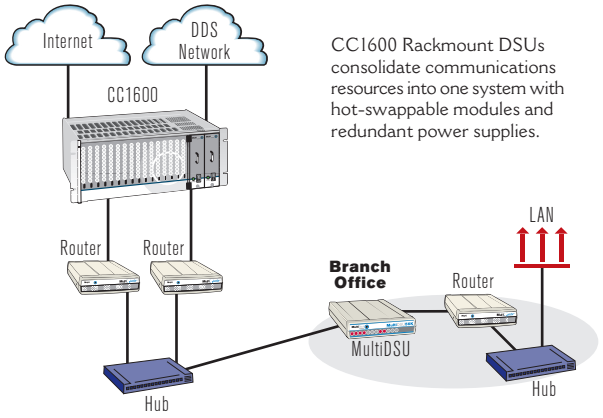


Router uses rackmount DSUs in CC1600 rack to connect to Internet. Multiport serial cards connect to modems in CC1600 rack for dial up users.

Dial-Out Services. In addition to dial-in services, you can also provide dial-out Internet access to LAN users. This eliminates the cost and hassle of installing and maintaining modems and phone lines for every desktop.

Fax Services. The CC1600-Series is the ideal solution for dedicated fax servers. The easily installed, reliable modems provide fax send and receive capabilities in one small rack.

Central Site-to-Branch Connectivity. Provide a point-to-point connection between the central site and a branch office with a 56K DSU card in the CC1600-Series at the corporate office and a stand-alone 56K DSU at the branch office.



CC1600 Rackmount DSUs consolidate communications resources into one system with hot-swappable modules and redundant power supplies.

System Architecture

Cost-Effective. The CC1600-Series conserves back office space and minimizes administration expenses by consolidating up to 16 modems or DSUs in one standard equipment rack using a single power outlet.

Scalable. Scaling dial-in/dial-out services through the CC1600-Series is easy and cost-effective. Select the number of modems or DSU cards to meet today's networking needs. As demand grows simply add more cards to your system and preserve your initial investment.

Serviceability. The CC1600-Series rack provides the option for dual-redundant power supplies that are hot-swappable. In addition, individual modem and DSU cards are hot-swappable so a card can be installed or removed without interrupting service to the other cards on the system.

Diagnostics. The power-on self-test, local analog loop, local digital loop, and remote digital loop diagnostics provide valuable information on the CC1600-Series.

Fully Tested and Supported. All CC1600-Series components are fully tested and supported by Multi-Tech so there is only one place to call when you need technical support.

Solution Options

CC1600-Series System. An operational CC1600-Series system requires one chassis, one power supply (two are recommended for redundancy), and up to 16 Multi-Tech modem or DSU cards. The CC1600 rack provides versatility to be used in a wide variety of applications like: dial-in remote access, dial-out, fax services, and leased line or DDS connectivity. The supporting modems and DSUs can be mixed and matched to suit your needs:

- V.34/33.6K dial-in/dial-out services over PSTN
- V.34/33.6K dial-in/dial-out services over 2- or 4-wire leased line
- V.34/33.6K dial-in/dial-out services over 4-wire leased line with dial backup
- Dedicated 56K DDS line

System Components

Card Cages. The CC1600-Series card cage is offered in several models to accommodate various applications.

Card Cage Features	CC1600-11L	CC1600-11L/48v	CC1600-21	CC1600-21/48v
Dial-up	●	●	●	●
2-wire leased line	●	●	●	●
4-wire leased line			●	●
Optional V.34 Modem LED Labeling on front panel	●	●	●	●
PS1600 -48 DC power		●		●
PS1600 Universal 90v-245v AC	●		●	

Modem Cards. The CC1600-Series modem cards provide V.34/33.6K bps dial-in/dial-out connectivity, field-proven reliability for mission-critical corporate applications and a robust feature set. These modems are the rackmount version of Multi-Tech's leading corporate modems from the MultiModemII family—the MT2834BA and MT2834BL models.

Modem Features	MT2834BR	MT2834BLR
33.6K/V.34	●	●
14.4K Class 2 Fax	●	●
Dial-up/Sync/Async	●	●
2-wire leased line	●	●
4-wire leased line with dial backup		●
Error correction/V.42 & MNP 3 & 4	●	●
Data compression V.42bis & MNP®5	●	●
U.S. Caller ID	●	●
Callback Security, Remote Configuration	●	●
DTMF Tone Detection, 11 bit support	●	●
Compatible with CC1600-11L & CC1600-11L/-48v	●	
Compatible with CC1600-21 & CC1600-21/-48v	●	●

Some of the features that make these modems ideal for corporate applications are discussed below.

The **callback security** feature maintains network security and saves on long distance calling costs from remote offices and mobile users.

For multiple sites, the **remote configuration** feature is ideal. Administrators can configure the modems from the central site using dial-up software like HyperTerminal®.

For mission-critical applications, the MT2834BLR modem card supports **dial backup**. If the leased line connection for the card goes down; the modem switches to a dial-up line until the primary line is available.

DSU Card. The Multi-Tech DSU card is a multi-rate 56K DSU that supports synchronous equipment at 2.4K to 56K and asynchronous equipment at 2.4K to 19.2K.

DSU Features	MT56DSUR
Sync 2.4K, 4.8K, 9.6K, 19.2K, & 56K DDS	●
Async 2.4K, 4.8K, 9.6K, 19.2K	●
Internal & DTE clocking	●
Network DSU/CSU, remote, & local loopback and test pattern diagnostics	●
AT&T 41450 & 62310 standards	●
External DTE clocking	●

The DSU card is **easy to install** and requires little to no maintenance. You simply plug the line service and the DTE equipment into the MultiDSU, configure it, and you're up and running. And when necessary, built-in test capabilities let you quickly troubleshoot line problems.

Other Multi-Tech Solutions and Services

DSUs. Multi-Tech MultiDSUs are Data Service Units/Channels Service Units (DSU/CSU) that will connect your router, frame relay device or other DTE equipment to digital service for central site-to-branch office connectivity.

Voice/Fax Over Data Gateways and Routers. To save on long distance calling costs between business offices, Multi-Tech has voice, data and fax convergence solutions for the small to midsize business. For IP networks, look at the MultiVOIP family; for frame relay networks look at the MultiFRAD with voice family; and for routing and convergence look at the RouteFinder with voice.

Specifications

Card Cage

Description: Metal construction with vent holes, built-in mounting brackets, and connections for power, data ports, and phone line or digital service
Power Supply: 70W fully loaded; 5v DC & ±15v DC regulated
Cooling Fan: 1
Connectors: One 3-prong grounded receptacle, 16 DB-25 data ports, & 16 RJ-11 jacks (dial-up models) or 3 50-pin connectors (male) for RJ-21 connections (leased line models)
Modem Card Options: Multi-Tech MT2834BR & MT2834BLR
DSU Card Options: Multi-Tech MultiDSU MT56DSUR. See the MultiDSU data sheet (86000140) for more information.
Dimensions: 19" w × 7" h × 15" d
(48 cm × 18 cm × 38 cm)
Weight: 21 lbs. with 1 power supply (9.6 kg)
Operating Temperature: 32-120°F (0-50°C)

Modem Cards

Models: MT2834BR, MT2834BLR, MT2834BRI, MT2834BLRI
Data: Enhanced V.34, V.34, V.32bis, V.32, V.22bis
Error Correction: V.42
Data Compression: V.42bis, MNP® 3 & 4 & Class 5
Fax: V.17 or V.29, Group 3, Class 2
DTE Interface: RS-232 C/D
Physical Description:
10.5" w × 5.5" h × 0.9" d; 1.5 lbs.
26.7 cm × 14.0 cm × 2.2 cm; 0.68 kg
Operating Temperature Range: 32-120°F (0-50°C)

DSU Card

Model: MT56DSUR
Link Speeds: 2.4K, 4.8K, 9.6K, 19.2K, & 56K
Link Interface: RJ-48S
DTE Rates: 2.4K, 4.8K, 9.6K, 19.2K, & 56K sync; 2.4K, 4.8K, 9.6K, & 19.2K async
DTE Interface: RS-232C/D and V.35
Command Interface: DIP switches
Physical Description:
5.5" w × 0.9" h × 10.5" d; 1.5 lbs.
14.0 cm × 2.2 cm × 26.7 cm; 0.7 kg

Ordering Information

Model	Description	Region
Card Cages		
Order one or two power supplies separately.		
CC1600-11L	RJ-11 Chassis (Dial-Up)	Global
CC1628-11L*	RJ-11 V.34 Chassis (Dial-Up)	Global
CC1600-11L/48v	RJ-11 Chassis (Dial-Up)	Global
CC1628-11L/48v*	RJ-11 V.34 Chassis (Dial-Up)	Global
CC1600-21	RJ-21 Chassis (Leased)	Global
CC1628-21*	RJ-21 V.34 Chassis (Leased)	Global
CC1600-21/48v	RJ-21 Chassis (Leased)	Global
CC1628-21/48v*	RJ-21 V.34 Chassis (Leased)	Global
Power Supplies		
PS1600†	90-245v AC Power Supply	Global
PS1648	-48v DC Power Supply	Global
Modem Cards		
MT2834BR	33.6K Rack Modem (Dial-Up)	US/Can
MT2834BLR	33.6K Rack Modem (Leased)	N. Am.
MT2834BRI‡	33.6K Rack Modem (Dial-Up)	Euro/Intl
MT2834BLRI‡	33.6K Rack Modem (Leased)	Euro/Intl
DSU Card		
MT56DSUR	19.2K-56K Sync/Async Rack DSU	US/Can

* The front panel has V.34/33.6K modem LED labeling.

† Specify North American, European, or British-style power cord and voltage when ordering.

‡ Approved for connection to public telephone network in most countries in Europe, the Americas, Asia, and other regions. Specify country when ordering.

Made in Mounds View, MN, U.S.A.

Trademarks: Intelligent Serial Interface, MultiDSU, MultiModem, MultiModemII, MultiVOIP, RouteFinder, Multi-Tech, & the Multi-Tech logo: Multi-Tech Systems, Inc. / All other products or technologies are the trademarks or registered trademarks of their respective holders.

World Headquarters
Multi-Tech Systems, Inc.
2205 Woodale Drive
Mounds View, MN 55112 U.S.A.
Tel: (612) 785-3500 or (800) 328-9717
Fax: (612) 785-9874
www.multitech.com

U.K. Sales Office
Multi-Tech U.K., Ltd.
Unit 1, Thames Court
2 Richfield Avenue
Reading, Berkshire RG1 8EQ U.K.
Tel: +(44) 118-959 7774
Fax: +(44) 118-959 7775

Multi-Tech Systems, Inc., has sales offices in China, France, Germany, India, the Netherlands, and the United Kingdom. For more information, contact Multi-Tech world headquarters.

Copyright © 1999 by Multi-Tech Systems, Inc. All rights reserved.
10/99 86000316